

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A system for combining narrowband and broadband transport mechanisms in a communications network, comprising:

a ~~first~~ narrowband telecommunications node, said ~~first~~ narrowband telecommunications node including narrowband switching fabric and switching intelligence;

a plurality of ~~second~~ broadband nodes, each ~~second~~ broadband node of ~~said plurality of second nodes~~ including broadband switching fabric, but having no switching intelligence; and

an interworking entity, ~~said interworking entity~~ operatively connectable connected to ~~said first~~ the narrowband telecommunications node and said plurality of ~~second~~ broadband nodes, said interworking entity adapted to receive data and call control instructions in a first format from ~~said first~~ the narrowband telecommunications node, map the received data and call control instructions into a second format interpretable by said plurality of ~~second~~ broadband nodes, and send the mapped data and call control instructions to at least one ~~second~~ broadband node of said plurality of ~~second~~ broadband nodes; and

~~wherein said interworking entity thereby enables said plurality of second nodes to be controlled, at least partially, by the switching intelligence of said first node~~

wherein the switching intelligence in the narrowband telecommunications node at least partially controls the plurality of broadband nodes through the interworking entity.

2. (Canceled)

3. (Currently Amended) The system according to claim 1, wherein said interworking entity comprises a third node between ~~said first~~ the narrowband telecommunications node and said plurality of ~~second~~ broadband nodes.

4. (Currently Amended) The system according to claim 1, wherein said interworking entity is at least one of part of and co-located with a second node of said plurality of ~~second~~ broadband nodes.

5. (Currently Amended) The system according to claim 1, wherein said interworking entity is further adapted to emulate an interface for a synchronous transfer mode (STM)-based node with respect to ~~said first~~ the narrowband telecommunications node.

6. (Currently Amended) The system according to claim 1, wherein said plurality of ~~second~~ broadband nodes comprise at least part of a broadband network.

7. (Currently Amended) The system according to claim 6, wherein each ~~second broadband node of said plurality of second nodes~~ is adapted to communicate signaling information and data information over the broadband network and to convert broadband information into another media type.

8. (Currently Amended) The system according to claim 6, wherein the mapped data comprises instructions for the at least one ~~second~~ broadband node to establish a communication path through at least a portion of the broadband network.

9. (Original) The system according to claim 1, wherein the received data comprises at least one first network address, and the mapped data comprises at least one second network address.

10. (Original) The system according to claim 9, wherein the at least one first network address comprises at least one trunk connection.

11. (Original) The system according to claim 9, wherein the at least one second network address comprises at least one asynchronous transfer mode (ATM) identifier.

12. (Currently Amended) An arrangement for combining narrowband and broadband transport mechanisms in a communications network, comprising:

a first narrowband node, said first node including that includes narrowband switching fabric and switching intelligence;

a second broadband node, said second node including that includes only broadband switching fabric; and

an interworking entity, ~~said interworking entity~~ operatively ~~connectable~~ connected to ~~said first~~ the narrowband node and ~~said second~~ the broadband node, said interworking entity adapted to receive data and call control instructions in a first format from ~~said first~~ the narrowband node, map the received data and call control instructions into a second format interpretable by ~~said second~~ the broadband node, and send the mapped data and call control instructions to ~~said second~~ the broadband node.

13. (Original) The arrangement according to claim 12, wherein the first format comprises a circuit-switched format, and the second format comprises a packet-switched format.

14. (Currently Amended) A system for combining narrowband and broadband transport mechanisms in a communications network, comprising:

a ~~first narrowband node, said first node including that includes~~ call control functionality and circuit-switched connection control functionality;

a plurality of ~~second broadband nodes, each second broadband node of said plurality of second nodes~~ including packet-switched connection control functionality, but not call control functionality; and

an interworking entity, said interworking entity operatively connected to ~~said first the narrowband node~~ and to said plurality of ~~second broadband nodes~~, said interworking entity adapted (i) to receive routing data in a circuit-switched format from ~~said first the narrowband node~~, (ii) to map the received routing data into a packet-switched format that is implementable by said plurality of ~~second broadband nodes~~, and (iii) to send the mapped routing data to at least one ~~second broadband node~~ of said plurality of ~~second broadband nodes~~.

15. (Original) The system according to claim 14, wherein the circuit-switched format comprises addresses corresponding to switch devices.

16. (Original) The system according to claim 14, wherein the packet-switched format comprises addresses corresponding to an H.248 protocol.

17. (Currently Amended) The system according to claim 14, wherein ~~said first the narrowband node~~ includes a synchronous transfer mode (STM) switch, and the at least one ~~second broadband node~~ of said plurality of ~~second broadband nodes~~ includes an asynchronous transfer mode (ATM) switch.

18. (Currently Amended) The system according to claim 14, further comprising:

a plurality of third nodes, each third node of said plurality of third nodes connected to the at least one ~~second~~ broadband node of said plurality of ~~second~~ broadband nodes; and

wherein each third node of said plurality of third nodes is configured to handle a different telecommunications protocol.

19. (Currently Amended) The system according to claim 18, wherein the at least one ~~second~~ broadband node is adapted to convert media of one type to media of another type, the another type corresponding to a different telecommunications protocol that is associated with at least one third node of said plurality of third nodes.

20. (Currently Amended) The system according to claim 14, wherein at least one ~~second~~ broadband node of said plurality of ~~second~~ broadband nodes is adapted to add a communication path therethrough responsive to the mapped data.

21. (Currently Amended) The system according to claim 14, wherein at least one ~~second~~ broadband node and another node of said plurality of ~~second~~ broadband nodes are adapted to add a communication path therebetween responsive to the mapped data.

22. (Currently Amended) A method for combining narrowband and broadband transport mechanisms in a communications network, comprising the steps of:

sending a first communication path instruction from a ~~first~~ narrowband node to a ~~second node~~ an interworking entity;

mapping the first communication path instruction to a second communication path instruction at the ~~second node~~ interworking entity;

sending the second communication path instruction from the ~~second node~~ interworking entity to at least one ~~third~~ broadband node in a broadband network; and

establishing a communication path in the broadband network responsive to the second communication path instruction.

23. (Currently Amended) The method according to claim 22, further comprising the step of:

performing a destination number analysis to derive the first communication path instruction at the ~~first~~ narrowband node.

24. (Currently Amended) The method according to claim 22, further comprising the step of:

receiving the second communication path instruction at the ~~second node~~ interworking entity.

25. (Canceled)

26. (Original) The method according to claim 22, wherein the first communication path instruction pertains to a circuit-based address space, and the second communication path instruction pertains to a packet-based address space.

27. (Currently Amended) The system according to claim 6, wherein a connection between at least one of ~~said second~~ the broadband nodes and said interworking entity is dynamically created.

28. (Currently Amended) The system according to claim 6, further comprising:
a permanent connection between at least one of ~~said second~~ the broadband nodes and said interworking entity.

29. (Currently Amended) The arrangement according to claim 12, wherein a connection between ~~said second~~ the broadband node and said interworking entity is dynamically created.

30. (Currently Amended) The arrangement according to claim 12, further comprising:

a permanent connection between ~~said second~~ the broadband node and said interworking entity.

31. (Currently Amended) The system according to claim 14, wherein a connection between at least one of ~~said second~~ the broadband nodes and said interworking entity is dynamically created.

32. (Currently Amended) The system according to claim 14, further comprising:

a permanent connection between at least one of ~~said second~~ the broadband nodes and said interworking entity.

33. (Currently Amended) The method according to ~~claim 25~~ claim 22, wherein said step of sending the second communication path instruction further comprises:

sending the second communication path instruction from the ~~second node~~ interworking entity to said at least one ~~third~~ broadband node using a dynamically created connection between the ~~second node~~ interworking entity and said at least one ~~third~~ broadband node.

34. (Currently Amended) The method according to ~~claim 25~~ claim 22, wherein said step of sending the second communication path instruction further comprises:

sending the second communication path instruction from the ~~second node~~ interworking entity to said at least one ~~third~~ broadband node using a permanent connection between the ~~second node~~ interworking entity and said at least one ~~third~~ broadband node.

35. (Currently Amended) The system according to claim 6, wherein ~~said first~~ the narrowband telecommunications node, said plurality of ~~second~~ broadband nodes and said interworking entity comprise a first domain, and further comprising:

a second domain comprising:

an additional ~~first~~ narrowband telecommunications node, said additional ~~first~~ narrowband telecommunications node including said narrowband switching fabric,

an additional plurality of ~~second~~ broadband nodes, each ~~second~~ broadband node of said additional plurality of ~~second~~ broadband nodes including said broadband switching fabric and comprising at least part of said broadband network, and

an additional interworking entity, said additional interworking entity operatively connectable to said additional ~~first~~ narrowband telecommunications node and said additional plurality of ~~second~~ broadband nodes; and

wherein said first domain and said second domain are interconnected by a permanent connection between one of said plurality of ~~second~~ broadband nodes within said first domain and one of said additional plurality of ~~second~~ broadband nodes within said second domain.

36. (Currently Amended) The arrangement according to claim 12, wherein ~~said first~~ the narrowband node, ~~said second~~ the broadband node, and ~~said the~~ interworking entity comprise a first domain, and further comprising:

a second domain comprising:

an additional ~~first~~ narrowband node, said additional ~~first~~ narrowband node including said narrowband switching fabric,

an additional ~~second~~ broadband node, said additional ~~second~~ broadband node including said broadband switching fabric, and

an additional interworking entity, said additional interworking entity operatively connectable to said additional ~~first~~ narrowband node and said additional ~~second~~ broadband node;

wherein said first domain and said second domain are interconnected by a permanent connection between ~~said second~~ the broadband node of said first domain and ~~said the additional second~~ broadband node of said second domain.

37. (Currently Amended) The system according to claim 14, wherein ~~said first~~ the narrowband node, ~~said the~~ plurality of ~~second~~ broadband nodes, and ~~said the~~ interworking entity comprise a first domain, and further comprising:

a second domain comprising:

an additional ~~first~~ narrowband node, said additional ~~first~~ narrowband node including said call control functionality and said circuit-switched functionality,

an additional plurality of ~~second~~ broadband nodes, each ~~second~~ broadband node of said additional plurality of ~~second~~ broadband nodes including said packet-switched connection control functionality, and

an additional interworking entity, said additional interworking entity operatively connectable to said additional ~~first~~ narrowband node and said additional plurality of ~~second~~ broadband nodes; and

wherein said first domain and said second domain are interconnected by a permanent connection between one of said plurality of ~~second~~ broadband nodes within said first domain and one of said additional plurality of ~~second~~ broadband nodes within said second domain.

38. (Currently Amended) The method according to ~~claim 25~~ claim 22, wherein ~~said first~~ the narrowband node, ~~said second node~~ the interworking entity, and ~~said the~~ at least one ~~third~~ broadband node comprise a first domain, and wherein said step of establishing a communication path further comprises:

using a permanent connection between one of said at least one ~~third~~ broadband node within said first domain and one of at least one additional ~~third~~ broadband node within a second domain.